APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/694,452	10/23/2000	Michael Thomas Brady	BLD9-2000-0056US1	9596

7590   03/18/2004

CRAWFORD MAUNU PLLC
1270 NORTHLAND DRIVE
SUITE 390
ST. PAUL, MN 55120

EXAMINER
NGO, CHUONG D

ART UNIT	PAPER NUMBER
2124	19

DATE MAILED: 03/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
	09/694,452	BRADY ET AL.
Office Action Summary	Examiner	Art Unit
	Chuong D Ngo	2124

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>26 January 2004</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-49* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-49* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

1.   The nonstatutory double patenting rejection is based on a judicially created doctrine
grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or
improper timewise extension of the "right to exclude" granted by a patent and to prevent
possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29
USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985);
In re Van Ornum, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438,
77164 USPQ 619 (CCPA 1970);and, *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA
1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to
overcome an actual or provisional rejection based on a nonstatutory double patenting ground
provided the conflicting application or patent is shown to be commonly owned with this
application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal
disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37
CFR 3.73(b).

2.   Claims 1-49 are provisionally rejected under the judicially created doctrine of double

patenting over claims 1,2,10,13-16,22,23,32,35-38,44,45,53,56-59,65,66 and 74-78 of

copending Application No. 09/694,448. This is a provisional double patenting rejection since

the conflicting claims have not yet been patented.

The subject matter claimed in the instant application is fully disclosed in the referenced

copending application and would be covered by any patent granted on that copending

application since the referenced copending application and the instant application are claiming

common discrete cosine transfom.

Furthermore, there is no apparent reason why applicant would be prevented from

presenting claims corresponding to those of the instant application in the other copending

application. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also

MPEP § 804.

3.   Claims 1-49 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Babkin

(5,642,438) in view of Mattela et al. (5,781,239).

As per claims 1-11 and 36-49, Babkin discloses in claim 1 a method for compressing

image data by discrete cosine transform including a scaled transform equations (col. 20, lines 1-

10) which can be seen as being arranged into 3 collections, each having at least two transform

equation with at least two transform constants (the first collection including the first two rows of

the matrix corresponding to F(0) and F(4), the second collection including the next two rows of

the matrix corresponding to F(2) and F(6), and the third collection including the last four rows of

the matrix corresponding to F(1), F(3), F(5) and F(7)). Each of the collection, according to Eqs.

(2), set (3), set (4), set (6) and col. 8, lines 13-30, is obtained by independently scaling the

corresponding transform equations in Eq. set (4) by a scaling term which is a transform constant

within the collection (scaling term α for the first collection, δ for the second collection, and v for

the third collection). It is noted that Babkin does not specifically discloses the scaled transform

constants represented by sums of powers of 2. However, Mattela el al. suggests in col. 15, lines

60 - col. 16 line 18, the representations of the scaled transform constants by sums of powers of 2

in order to perform multiplications by simple shift/add operations. Thus it would have been

obvious to a person of ordinary skill in the art to represent the scaled transform constants of

Babkin by sums of powers of 2 for performing multiplications by simple shift/add operations as

taught by Mattela et al. in order to reduce circuitry and processing time.

As per claims 13-35, it is noted the combination of Babkin and Mattela et al. does not disclose a use of the data compression in a data printer. However, since the use of data transform for data compression in a data printer is well-known in the art, a person of ordinary skill in the art would have found it an obvious application to use the data compression as taught by Babkin in a data printer as claimed in order to reduce circuitry and processing time.

4.   Claims 1-49 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Babkin (5,642,438) in view of Dierke (5,854,757).

As per claims 1-11 and 36-49, Babkin discloses in claim 1 a method for compressing image data by discrete cosine transform including a scaled transform equations (col. 20, lines 1-10) which can be seen as being arranged into 3 collections, each having at least two transform equation with at least two transform constants (the first collection including the first two rows of the matrix corresponding to F(0) and F(4), the second collection including the next two rows of the matrix corresponding to F(2) and F(6), and the third collection including the last four rows of the matrix corresponding to F(1), F(3), F(5) and F(7)). Each of the collection, according to Eqs. (2), set (3), set (4), set (6) and col. 8, lines 13-30, is obtained by independently scaling the corresponding transform equations in Eq. set (4) by a scaling term which is a transform constant within the collection (scaling term α for the first collection, δ for the second collection, and v for the third collection). It is noted that Babkin does not specifically discloses the scaled transform constants represented by sums of powers of 2. However, Dierke suggests in col. 6, lines 19 - col. 715, line 18, the representations of the scaled transform constants by sums of powers of 2 in order to perform multiplication/division by simple shift/add operations. Thus it would have

been obvious to a person of ordinary skill in the art to represent the scaled transform constants of

Babkin by sums of powers of 2 for performing multiplication/division by simple shift/add

operations as taught by Dierke in order to reduce circuitry and processing time.

As per claims 13-35, it is noted the combination of Babkin and Dierke does not disclose a

use of the data compression in a data printer. However, since the use of data transform for data

compression in a data printer is well-known in the art, a person of ordinary skill in the art would

have found it an obvious application to use the data compression as taught by Babkin in a data

printer as claimed in order to reduce circuitry and processing time.

5.   Applicant's arguments with respect to the claims have been considered but are moot in

view of the new ground(s) of rejection.

6.   The text of those sections of Title 35, U.S. Code not included in this action can be

found in a prior Office action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Chuong D Ngo whose telephone number is (703) 305-9764.

The examiner can normally be reached on Tuesday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Kakali Chaki can be reached on (703) 309-9662. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published

applications may be obtained from either Private PAIR or Public PAIR. Status information for

unpublished applications is available through Private PAIR only. For more information about

the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the

Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-

free).

Chuong D Ngo
Primary Examiner
Art Unit 2124

03-12-2004